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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,434	03/28/2001	Koji Fujiyama	4970/OJ035	1759

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NEW YORK, NY 10022-7513

EXAMINER
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PATEL, GAUTAM

ART UNIT	PAPER NUMBER
2655	8

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,434

Applicant(s)

FUJIYAMA, KOJI

Examiner

Gautam R. Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Response to Amendment**

1. This is in response to amendment filed on 2-19-04 ( Paper # 7).
2. Claims 1-4 remain for examination.

### ***Claim Rejections - 35 U.S.C. § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. § 102(b) as being anticipated by Yamada et al., US. patent 5,331,615 (hereafter Yamada).

As to claim 1, Yamada discloses the invention as claimed [see Figs. 2-14; especially 2] including Controlling means and transfer function holding means, comprising:

Controlling means [fig. 2, unit 37] for performing seek control for moving said optical pickup to a target track on the optical disc and focus servo control of said optical pickup according to a detected focus error signal and a transfer function; and

[a] transfer function holding means [fig. 2, unit 37] for holding a first transfer function for executing focus servo when said controlling means does not perform said seek control, and a second transfer function for executing focus servo when said controlling means performs said seek control. [col. 6, line 47 to col. 7, line 20]

NOTE: computers inherently have memory to hold commands and data.

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4. As to claim 4, it is rejected for similar reasons set forth in the rejection of claim 1, supra. As to the added limitation Yamada discloses:

an optical pickup for writing data on an optical disc and/or reading data from the optical disc [col. 5, line 65 to col. 6, line 19 and col. 1, lines 13-41].

***Claim Rejections - 35 U.S.C. § 103***

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamada as applied to claims 1 and 3 above and in view of Janssen US. patent 4,037,252 (hereafter Janssen).

As to claim 2, Yamada discloses all of the above elements, including the transfer function holding means. Yamada does not specifically disclose that the second transfer function has a smaller gain than the first transfer function and equivalent phase margin for similar stability of first function.

However, it is well known in the art that transfer function can be adjust depending upon the system requirement and reducing gain always provide a better stability in the phase margin. Also Janssen clearly discloses:

the second transfer function has a smaller gain than the said first transfer function and a phase margin capable of providing substantially same stability as that obtained by said first transfer function [col. 7, line 54 to col. 8, line 11] . Both Yamada and Janssen are interested in providing stable tracking in a disc shaped recording carrier and improving servo system under different conditions.

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One of ordinary skill in the art at the time of invention would have realized that external disturbances routinely plague the systems and therefore the scanning point need to be set at a stable setting during external disturbances when they happen. Therefore, it would have been obvious to have provided a transfer function stability criteria of having gain of second transfer function smaller than the first one in the system of Yamada as taught by Janssen because one would be motivated to reduce noise in the system of Yamada by providing a damped oscillation during occurrence of an external disturbance and also transfer function can be varied during this periods [col. 8, lines 1-11; Janssen].

NOTE: Stable and unstable range are equivalent of performing and not performing seek control.

6. As to claim 4, it is rejected for the same reasons set forth in the rejection of claim 2, supra.

7. Applicant's arguments filed on 2-19-04 ( Paper # 7).have been fully considered but they are not deemed to be persuasive for the following reasons.

8. In the REMARKS, the Applicant argues as follows:

A) That: "Yamada discloses a control apparatus in which a transfer function is varied in accordance with temperature change. In contrast, the present invention utilizes a transfer function which varies depending upon whether or not seek control is performed. Thus, the present invention and Yamada exercise control based upon entirely different parameters." [page 5, para. 4; REMARKS].

FIRST: Examiner respectfully disagrees. Close examination of Yamada shows that, Yamada discloses "The transfer function is therefore changed during the seek operation and ... In addition, when tracking control is temporarily made inactive, the delay circuit of each digital filter clears the values held before

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seeking began." [col. 6, lines 62-68]. In other words values stored [transfer function] are directly related to seek operation.

SECOND: Yamada also discloses that these transfer function, which varies according, to seek control is well known in the art [see col. 1, line 13 to col. 2, line 37]. And only thing that he has added is that this operation, in addition, takes care of the variation due to temperature. In other words it does not replace the seek function. Yamada does seek operation repeatedly so as to have minimum effect of temperature AND other factors that slowly change with time [see col. 7, lines 6-20; Yamada].

THIRD: Since claim 1, starts with "comprising", it is irrelevant what else Yamada is also disclosing.

B) That: "Janssen discloses nothing that would alleviate the defect of Yamada as a reference against the present claim." [page 5, para. 6; REMARKS].

The Applicant's are correct, however Janssen was NOT used for these limitations and Yamada does indeed disclose all these limitations and much more.

9. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### **Contact information**

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is

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(703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.

A handwritten signature in black ink, appearing to read "Gautam R. Patel", with a horizontal line underneath the name.

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2655

March 29, 2004